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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/763,123	01/22/2004	Wolfgang Schmidt	0275M-000863	4190
27572	7590	06/14/2005	EXAMINER	
HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 828 BLOOMFIELD HILLS, MI 48303			SHAW, CLIFFORD C	
			ART UNIT	PAPER NUMBER
			1725	
DATE MAILED: 06/14/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/763,123

Applicant(s)

SCHMIDT ET AL.

Examiner

Clifford C. Shaw

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 April 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) 19-35 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 0122, 0206.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **Detailed Action**

1.) In his "Response to Restriction/Election Requirement" filed on 4/29/2005, applicant elects, with traverse, the invention of Group I, claims 1-28, and further elects species B, claims 8-18, for further prosecution. Applicant traverses the restriction, stating that there is significant overlap of the claimed subject matter and further that claim 1 is generic to all three listed species. Applicant's traverse has been considered, with the following effect: the restriction between the group I and group II inventions is considered proper for the reasons of record; the identified species A and B are considered to sufficiently overlap each other in the manner in which they are claimed, that these species will be examined together; claim 1 is not generic to all of the species, particularly the species C since claim 1 calls for control of the arc based on a predetermined time while species C calls for control of the arc based on a predetermined energy being reached. Accordingly, claims 1-18 are examined in the instant Office action and claims 19-35 are withdrawn from further consideration as being drawn to non-elected inventions or species. The restriction requirement is made FINAL.

2.) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3.) Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kirchner et al. (6,011,234) taken with Ito (5,317,123). In columns 6-8 and at its figure 3, the patent to Kirchner et al. (6,011,234) discloses a processes for controlling the welding of an element to a component with the following steps: detecting the height of element 2 relative to component 1 throughout the process by means of detector 10; energizing the welder at an energizing height as discussed in column 7, lines 15-17; lowering the element onto the component as shown in figure 3; turning off the energy to the welder as discussed at column 8, lines 20-30. The claims differ from Kirchner et al. (6,011,234) in calling for stopping the welding energy at a particular time. This difference does not patentably distinguish over the prior art. At the time applicant's invention was made, it would have been obvious to have terminated the weld energy in Kirchner et al. (6,011,234) in any well known fashion. In particular, it would have been obvious to have terminated the weld current based on sensing element to component contact the motivation being the teachings of Ito (5,317,123) that such is advantageous (see column 4, lines 30-35 in Ito (5,317,123)). Note that in applying these teachings of Ito (5,317,123) to Kirchner et al. (6,011,234) the welding energy will be terminated after a specified time because the component displacement taught by Kirchner et al. (6,011,234) is a predefined curve in time and the energization of the weld in the combination is slaved to this curve, thus resulting in a predetermined weld time.

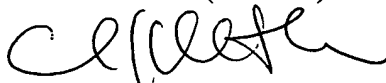
4.) The patents to Killian et al. (5,406,044) and to Hoffmann et al. (5,938,945) are cited to show prior art stud welders wherein stud height above the workpiece is detected.

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Any inquiry concerning this communication should be directed to Clifford C Shaw at telephone number 571-272-1182. The examiner can normally be reached on Monday through Friday of the first week of the pay period and on Tuesday through Friday of the second week of the pay period.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Thomas G. Dunn, can be reached at 571-272-1171. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Clifford C Shaw  
Primary Examiner  
Art Unit 1725

June 13, 2005